ESSD BULLETIN



AUGUST 2007

Michigan Department of Environmental Quality www.michigan.gov/deq Environmental Science and Services Division (ESSD) PO Box 30457 Lansing, MI 48909-957

Jennifer M. Granholm, Governor Steven E. Chester, Director

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POLLUTION PREVENTION (P2) WEEK SEPTEMBER 17-23, 2007

Celebrate Pollution Prevention (P2) during P2 Week September 17-23, 2007 through actions that reduce toxics, green house gases and save money by reducing waste and energy. P2 is a means to achieve goals like green building, lean manufacturing, energy efficiency and a clean environment. P2 Week provides an opportunity for individuals, communities and businesses to show case ideas on ways to reduce waste, energy or toxics. At home, P2 can provide energy savings or reduce the toxins our children handle. Schools can and do eliminate toxins by using less toxic alternatives in labs and cleaning supplies and by controlling bus exhausts. At work, products can be purchased



or made that contain less toxics, more recycled content, or create less waste. Also, if we use less toxics, there is less concern for vandalism by terrorists or even weather related damages and could mean lower business insurance costs.

Try a few P2 activities during P2 Week this year and encourage your neighbors and colleagues to participate as well! If you are a business, join one or more of the DEQ's partnerships this week to learn more about how others in business are practicing P2.

Each year, the National Pollution Prevention Roundtable issues a unique <u>P2 Week</u> <u>poster</u> that is available at <u>www.p2.org/p2week/index.cfm</u>. There is a link on the left side of that Web site for ordering posters. The <u>DEQ P2 Poster</u> can be downloaded and printed.

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P2 Week tips, Governor's proclamations, legislative resolutions, P2 tips, environmental calendars, Sustainable Business Forums, and many other resources are on the DEQ P2 Week website at www.michigan.gov/deqp2initiatives. From this Web site, you can also go to the Bright Idea Web site and discover energy savings by using compact fluorescent light bulbs. Contact the DEQ's Environmental Assistance Center at 800-662-9278 if you have any questions or need additional information.

TURNING REACH INTO AN OPPORTUNITY: A Training on Implementing the European Union's New REACH Legislation

September 27, 2007, Lansing Community College West Campus

REACH — Registration, Evaluation, and Authorization of Chemicals — is the recently adopted overhaul of the chemicals management system in the European Union (EU). Entered into force June 1, 2007, REACH has important implications for US firms exporting to European Member States.

Attend this one-day training to learn from one of the few REACH authors and other experts about what you need to know to comply with REACH, stay competitive, and advance more sustainable chemicals management in your firm.

Why Should I Attend?

The new REACH system puts much more responsibility on companies to collect data on most chemicals on the market, assess the risk of these chemicals, and define safe use down the supply chain. It also requires companies to justify continued use of chemicals of very high concern. Any company exporting chemicals or chemical mixtures into the EU; competes in Europe, the US or elsewhere with products meeting European standards; or exports finished products to Europe has been affected by REACH.

This training session will help US companies prepare for REACH and turn it from a challenge into an opportunity. European companies have been preparing for the challenges and opportunities of REACH for several years— US companies must be prepared to remain competitive. Attendees will receive a database of tools and resources to help them make informed decisions about chemicals alternatives.

Complete conference agenda and registration information is available on the Web at www.chemicalspolicy.org/news.shtml. Registration fee is \$100 and includes continental breakfast, lunch, and conference materials. Pre-registration and pre-payment is required. Registration and Information Contact: Yve Torrie, Lowell Center for Sustainable Production, 978-934-3121.

P2 TIPS FOR DRIVING

- Check the tire air pressure to improve the gas mileage and savings.
- Keep your car well tuned to conserve gasoline and reduce harmful emissions.
- Walk, carpool, or ride your bike when possible.
- When purchasing a new vehicle, pick one that is as fuel-efficient as possible. Purchasing a smaller
 vehicle might be an option if it's practical to rent a truck/van for the occasional trips or heavy duty
 jobs.
- Don't idle the engine unless necessary. Ten seconds of idling consumes more fuel than restarting the engine.
- In cold weather, block heaters reduce the amount of fuel needed to warm up the engine in the morning.

• Use remote car starters only when absolutely necessary; this reduces the time that your car idles and uses less fuel.

- Don't fill the gas tank full on warm days. The gas is cool in the ground and will expand in the car's tank and overfill later if full.
- Eliminate commuting or short trips. Combine several errands into one trip to save fuel and time.
- Carpool for work or taking your kids to school or sports practices.
- Take public transit a few more times each week.
- If moving, move closer to work, school, and other activities to reduce driving time and need for a car.
- Give up the second car save money and encourage family members to try alternatives.
- Encourage your neighborhood to be more cyclist and pedestrian friendly.
- Use ethanol-blended gasoline in your vehicle.
- Use biodiesel in diesel vehicles to improve gas mileage and reduce dependence on foreign oil.
- Change the car's air filter frequently.

For Information on fuel efficient vehicles:

- U.S. EPA. Green Vehicles Guide, at www.epa.gov/greenvehicles/index.htm.
- U.S. Department of Energy. Information on fuel efficient vehicles, at www.fueleconomy.gov.

P2 TECHNOLOGY DEMONSTRATION WORKSHOP

The Retired Engineer Technical Assistance Program (RETAP) is hosting a P2 technology demonstration workshop on the successful adoption of advanced rinse water recycling systems within the electroplating process. The workshop is August 17th, at the KC Jones Plating Company, Hazel Park, Michigan. There is no cost to attend the workshop.

KC Jones Plating, in cooperation with the Laboratory for Multiscale Complex Systems Science and Engineering at Wayne State University (WSU), integrated advanced rinse water recycling systems into their bronze cyanide plating line. These changes successfully reduced the line's chemical and water usage requirements by 20-45 percent, while reducing associated wastewater treatment costs by up to 70 percent. The simple payback for the project was less than one year.

Professor Yinlun Huang will present the technology, its implementation , and the project's economical and environmental analysis. Mr. Thomas Januszek and his team at KC Jones Plating will describe the system installation.

Due to limited spacing, please register in advance by contacting David Herb, RETAP Manager, at 517-241-8176 or herbdw@michigan.gov.

MICHIGAN BIOMASS ENERGY PROGRAM (MBEP)

The Michigan Biomass Energy Program (MBEP) located in the State Energy Office is now seeking proposals from non-profit and public organizations for state projects that expand markets for energy and fuel derived from Michigan biomass resources. MBEP plans to award multiple grants of up to \$24,950 per project. Proposals are due to the Energy Office by 5:00 PM on Tuesday, August 21, 2007. See www.michigan.gov/biomass for more information. To obtain the Request for Proposal, contact tonsors@michigan.gov or 517-241-6223.

MSP TRUCKER REQUIREMENTS

As part of continued efforts to reduce traffic crashes involving commercial motor vehicles, the Michigan State Police (MSP) Motor Carrier Division is implementing Federal Motor Carrier Safety Administration (FMCSA) standards that allow all commercial motor vehicles to obtain a United States Department of Transportation (USDOT) number (Act 181, PA 1963, CFR 49, part 390.21). This new Intrastate Motor Carrier Identification Program will help the MSP Motor Carrier Division monitor existing safety concerns and ensure all intrastate commercial motor vehicles comply with national safety requirements. The program places the same federal motor carrier safety regulations on intrastate vehicles as vehicles that travel between states.



The Intrastate Motor Carrier Identification Program applies to any self-propelled or towed motor vehicle used on a Michigan highway in intrastate commerce to transport property or passengers. It will be phased in over a two-year period to allow operators time to comply with the requirements. By January 1, 2009, all commercial vehicles traveling in Michigan will need a USDOT number. To obtain a USDOT number, motor carrier companies must register with the FMCSA. The online application is available at www.safersys.org under the FMCSA Registration and Updates link.

The MSP Traffic Safety Division is responsible for commercial vehicle enforcement including the enforcement of trucking safety laws and weight restrictions, investigating administrative and maintenance procedures of local trucking companies, and providing local school districts with school bus inspections. Additional MSP information is available at www.michigan.gov/msp "Specialized Divisions" "Traffic Safety Division".

Information about liquid industrial waste and hazardous waste transporter requirements overseen by the MDEQ Waste and Hazardous Materials Division is available at www.michigan.gov/deqwaste "Hazardous & Liquid Industrial Waste Transporters."

TOP 10 REASONS TO RECYCLE

The Michigan Recycling Coalition, a non-profit membership organization representing professional recyclers from Michigan businesses and communities and individuals interested in supporting recycling, has started a new initiative to provide state policy makers information about recycling in Michigan. The initial fax to the Legislature is the fact sheet entitled, "Top 10 Reasons to Recycle" and can be viewed at www.michiganrecycles.org/pdf/MRCFaxJune2007.pdf



GO GREEN!

This isn't referring to Michigan State University, but about "environmental responsibility is everyone's responsibility". EPA now has an electronic newsletter that will include information for consumers on such issues as tips on what you can do, what you can use, how to calculate individual energy use, purchasing information, upcoming environmental activities and observances, and recent news reports from EPA.

General information about Go Green! is at www.epa.gov/newsroom/gogreen along with the link on how to receive the EPA Go Green! newsletter by email.

DO YOU WONDER "HOW CLEAN IS THE ELECTRICITY I USE?"

Visit EPA's updated Power Profiler website at www.epa.gov/cleanenergy/powerprofiler.htm



Power Profiler will:

- Determine your power grid region based on your ZIP code and electric utility.
- Compare the fuel mix and air emissions rates of the electricity in **your region** to the national average. Power Profiler displays the fuel mix in percent coal, oil, gas, nuclear, hydro-electric (water), and other renewable sources including biomass, wind, solar, geothermal, and landfill gas.
- Determine the air emissions impacts of electricity use in your home or business

The Power Profiler report will show you the air emissions attributable to the electricity you use in your home or business during one year along with a description of what these numbers mean in everyday terms. It uses emissions data for nitrogen oxides, sulfur dioxide, carbon dioxide, and mercury.

The website also includes links for both individuals and businesses on ways to reduce their energy use and save money. Businesses may want to consider participating in <u>EPA's CHP Partnership</u>. Combined heat and power (CHP), also known as cogeneration, is an efficient, clean, and reliable approach to generating power and thermal energy from a single fuel source.

FATS, OILS, AND GREASE IN THE FLOW

Fats, Oils, and Grease (FOG) are a frequent topic among collection system and Industrial Pretreatment professionals. FOG accumulates in sanitary sewers when restaurants, other businesses and residents pour fat, oil or grease down the drain. Communities are responsible for maintaining their local sewer system pipes and frequently have to deal with this problem under emergency conditions when sewers overflow and backup. Educating the public on FOG prevention throughout the system can lead to cost savings for everyone.

Various communities in Michigan have implemented FOG management programs and have success stories that can be shared with others. Collaboration can turn great ideas into reality and as a result, the FOG workshop was born. The purpose of the workshop was to provide considerations for local governments in developing FOG programs and to provide education on the keys to successful FOG management.

The FOG workshop was held on Monday, May 7, 2007. Topics included: Cost of FOG, FOG ordinance



panel, Yellow Grease Recycling for Restaurants, RETAP, and a FOG outreach panel. The 71 attendees were interested in FOG post-collection processing and uses such as biofuels.

The workgroup also developed materials on FOG prevention and discussed community experiences with FOG problems with build up in the sewers. Discussions took place regarding the development of a green plan for restaurants and residents to practice pollution prevention.

Links to DWSD FOG publications:

- o FOG brochure for businesses www.dwsd.org/cust/fog brochure bus web.pdf
- o FOG brochure for residents www.dwsd.org/cust/fog brochure res web.pdf
- o FOG poster <u>www.dwsd.org/cust/fog_poster_web.pdf</u>

Links to DEQ FOG publications:

- o FOG brochure www.deq.state.mi.us/documents/deq-ess-p2-restaurant-FOGbrochure.pdf
- o FOG poster www.deq.state.mi.us/documents/deq-ess-p2-restaurant-poster.pdf

Compliance Assistance Corner

Q. HOW HAS COMPLETION OF THE STATE'S WETLAND INVENTORY CHANGED WETLAND PROTECTION IN MICHIGAN?

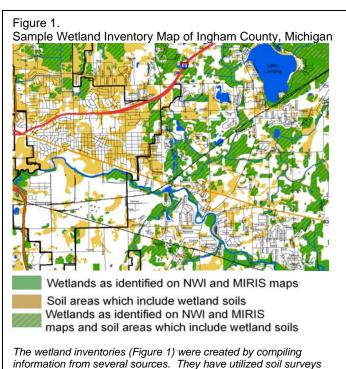
A. The Land and Water Management Division (LWMD), of the Department of Environmental Quality (DEQ), is responsible for administering Michigan's wetlands protection program. When the State's wetland protection statute was passed in 1979, it included a statewide wetland inventory requirement. Until recently, the technology and funding to complete this statewide

Compliance assistance staff are experienced department personnel in ESSD that specialize in another environmental program division. Staff provide one-on-one and referral assistance on calls received by the Environmental Assistance Center. If you have any environmental question on which you need assistance, call 1-800-662-9278

wetland inventory was not available. In 2002, the LWMD started a five year project to complete the wetland inventory with funding from the Great Lakes Protection fund. The LWMD certified to Director Steven. E. Chester on January 1, 2007, that the wetland inventory has been completed.

Now that the wetland inventories are completed, under Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 303), all wetlands over five acres in size are regulated. This is a change in the type of wetlands that are protected under Part 303. In the past, wetlands that were not contiguous to a Great Lake, inland lake, stream, or pond were unprotected in counties with less than 100,000 people. Now all wetlands that are over five acres in size are protected in Michigan regardless of whether they are contiguous to a watercourse, or not.

In addition to providing statewide uniformity in wetland regulation, completing the wetland inventory was also important for maintaining federal consistency in wetland regulation. Michigan is one of two states nationwide that have assumed the responsibility of administering wetland regulations under Section 404 of the Federal Clean Water Act. The U.S. Environmental Protection Agency has determined that the



In the wetland inventories (Figure 1) were created by compiling information from several sources. They have utilized soil surveys completed by the U.S. Department of Agriculture, and existing wetland mapping information, the National Wetland Inventory (NWI), by the U.S. Fish and Wildlife Service, and the Michigan Resources Inventory

regulation of all wetlands over five acres in size is important for maintaining federal consistency in Michigan's Section 404 program.

The wetland inventories (Figure 1) were created by compiling information from several sources. They have utilized soil surveys completed by the U.S. Department of Agriculture, and existing wetland mapping information, the National Wetland Inventory (NWI), by the U.S. Fish and Wildlife Service, and the Michigan Resources Inventory System (MIRIS), by the Michigan Department of Natural Resources. Although the inventories are not intended to define the specific location and boundary of a wetland, they are very useful as a tool for planning development, and screening properties for approximate wetland locations. For example, prospective property buyers can now use the inventory to evaluate the likelihood that their purchase will include wetland areas, and the need for further review by a wetland professional.

The LWMD continues to provide a service for precise identification of wetland locations and boundaries through its Wetland Identification Program. This program includes the on-site review of a property necessary for precise identification of wetland boundaries. More information on the Wetland Identification Program is available on-line at www.michigan.gov/deqwetlands.

The wetland inventory maps have been distributed to each county's extension office, register of deeds office, and clerk office. Copies of the wetland inventory maps can be viewed at the DEQ Web site, as well, at the Web address listed above. Look for the "Wetland Inventory Maps" link on the wetlands page. If paper copies of the wetland inventory map for your county are needed, an order form can be obtained through the same link.

CREATING FLORAL SUCCESS IN RAIN GARDENS

Rain gardens are one way that individuals as well as communities can help preserve and improve the quality of rivers and lakes. These gardens collect rainwater runoff and filter and slowly release it into the ground. This reduces the amount of runoff and pollutants reaching storm drains leading directly to rivers and lakes. A rain garden typically retains 30 percent more rainwater than a conventional patch of lawn. Once established rain gardens require less maintenance and fewer chemicals than lawns, however, they must be designed, vegetated and maintained properly.

Creating a successful rain garden does take planning. They must: be in the appropriate location, sized correctly, infiltrate effectively, be vegetated appropriately and maintained. The DEQ Non-Point Source Pollution Control Program grants have provided funding for many rain gardens in communities

throughout Michigan. Follow-up review of some of these projects has shown that while many of these gardens were functioning well and looked very nice they frequently suffered "vegetation failure."

Native plants were used in all of the rain gardens/bio-infiltration practices reviewed. Native plants are generally recommended, though not a necessity, for use in rain gardens. Native plants are preferred as they are already adapted to the climate, soil conditions, and herbaceous pests. They provide supportive habitat for native wildlife species and once properly established, require minimal maintenance

There are many tools and resources available to assist in creating an effective rain garden (see below). To be successful make sure enough time, effort and money are allocated to the



This rain garden, created by Raingardens.org with the city of Grand Rapids, Michigan, and the homeowner, helps solve a storm-drain problem without expensive roadwork. (Courtesv Raingardens.org)

planning, purchasing, planting and maintenance of the rain garden. The following are some general guidelines that address key aspects in attaining great floral success.

Guideline #1: Use plant stock sizes such as plugs, pints, quarts and gallons as opposed to seed. This will provide blooms in the first growing season. Seed may seem easier and cheaper but experience shows this is not the case for rain gardens. Expect 3-5 years for seed to be successful with an intensive maintenance schedule. When using plugs, the general rule is to plant one per square foot.



September 2003 Eagle Lake raingarden (Installed Spring of 2003)

Guideline #2: Evaluate site condition in depth and choose plants whose needs correspond with identified conditions, including any pollutants likely to be found. If your site dries very quickly, is in full sun, will collect sediment and salt from the runoff choose plants that do well in these conditions as opposed to plants that need wetter sites, less sun and are very sensitive to sediment and salt.

Guideline #3: Choose plants that complement each other rather than ones that are too aggressive with each other. In the end this will help to reduce maintenance costs and efforts. An example of this would be: New England Aster (Aster novae-angliae) and Ironweed (Vernonia fasciculata). They can do well with each

other, easily tolerate a range of site conditions but can also easily crowd out such plants as Cardinal Flower (Lobelia cardinalis). Consult guidance documents as well as knowledgeable native plant growers on the intricacies of native plants in relation to your garden location.

Guideline #4: Create an appealing, well thought-out design, especially in highly visible public areas. This will give the effect that this garden is supposed to be there. The location of the garden and community goals should be taken into account to determine how this can be accomplished.

Guideline #5: Water your garden. As a general rule they need one-inch of water per week and more frequent watering during hot and dry periods. Do not depend on rain as the only source of water, especially during the establishment phase of the rain gardens. Native plants, if chosen appropriately, can withstand drier periods, however, their drought tolerance is not effective until their root systems have had time to develop. Continue this process until the rain garden has had at least one full year to establish then evaluate your watering regime.

Guideline #6: Have a comprehensive maintenance plan! Weeding is needed for the first couple of years at least. Consult guidance documents for more additional maintenance steps. Know who will do what and when, especially during the summer months. Invasive species may need extra attention to eradicate.

Guideline #7: Create a photo booklet of all desired and potentially undesired plants in your garden at each growing stage: seedling, grown plant without flowers and with flowers. This will significantly raise the knowledge level of caretakers and allow for more effective weeding.

General and Design Information:

- Rain Gardens of West Michigan: www.raingardens.org
- Rain Gardens: A How to Manual for Homeowners (Wisconsin Department of Natural Resources and University of Wisconsin-Extension):
 www.crwp.org/pdf files/wisconsin rain garden manual.pdf
- Rain Garden Network: <u>www.raingardennetwork.com</u>
- Bioretention Manual-Prince George's County Maryland www.goprincegeorgescounty.com/government/agencyindex/der/bioretention.asp

Plant Resource Guides and Information:

- Plants for Stormwater Design Minnesota Pollution Control Agency www.pca.state.mn.us/publications/manuals/stormwaterplants.html
- Native Plant Guide for Streams and Stormwater Facilities in NE Illinois ftp://ftp-fc.sc.egov.usda.gov/IL/techres/npg/NPG2004.pdf
- U.S. Department of Agriculture Plant Database http://plants.usda.gov/index.html
- Landscaping for Water Quality Plant List Michigan <u>www.deq.state.mi.us/documents/deqess-nps-L4WQ-plantlist.pdf</u>
- Wildflower Association of Michigan www.wildflowersmich.org

Example projects:

- DEQ NPS Grant Funded Project www.huronpines.org/project.php?action=view&projectId=55
- Minnesota Community Project www.landandwater.com/features/vol48no5/vol48no5 2.php

GREEN MEETINGS

Green meetings are rapidly becoming an important business opportunity for conference facilities. A green meeting or event incorporates environmental considerations to minimize its negative impact on the environment. Green meetings are not only good for the earth, they're great for business. Planning or supplying a green meeting gives you the competitive edge, a great reputation, and can save you time and money in the process.

The Michigan Department of Environmental Quality is committed to making our meetings and conferences environmentally sound. By reducing the use of unnecessary resources, minimizing waste, and conserving energy, we are helping to reduce environmental impact and save money.

On May 1, 2007 the U.S. Environmental Protection Agency (EPA) took green meetings a step further and revised its Acquisition Regulations to establish policies and procedures for acquiring environmentally preferred meeting and conference services. The EPA will consider environmental achievement along with such factors as price and past performance when buying meeting and conference space.

Facilities interested in hosting EPA events will be required to provide information about the environmentally preferable features and practices in use at their facilities. The following 14 questions will be asked of the facilities:

- (1) Do you have a recycling program? If so, please describe.
- (2) Do you have a linen/towel reuse option that is communicated to guests?
- (3) Do guests have easy access to public transportation or shuttle services at your facility?
- (4) Are lights and air conditioning turned off when rooms are not in use? If so, how do you ensure this?
- (5) Do you provide bulk dispensers or reusable containers for beverages, food and condiments?
- (6) Do you provide reusable serving utensils, napkins and tablecloths when food and beverages are served?
- (7) Do you have an energy efficiency program? Describe.
- (8) Do you have a water conservation program? Describe.
- (9) Does your facility provide guests with paperless check-in & check-out?
- (10) Does your facility use recycled or recyclable products? Please describe.
- (11) Do you source food from local growers or take into account the growing practices of farmers that provide the food? Please describe.

- (12) Do you use biobased or biodegradable products, including cafeteriaware? Please describe.
- (13) Do you provide training to your employees on these green initiatives? Please describe.
- (14) What other environmental initiatives have you undertaken, including any environment-related certifications you possess, EPA voluntary partnerships in which you participate, support of a green suppliers network, or other initiatives?

Other federal and state agencies are likely to follow in the EPA's footsteps, and at least one already has. Starting January 1, 2008, all Florida State Agencies and Departments will be required to do business only with Florida Green Lodging Program participants due to an Executive Order by Governor Charlie Crist.

For more information about green meetings, go to www.michigan.gov/deqp2, click on "Partnerships", then click on "Green Lodging Resources" and scroll down to the Environmental Resources section.

WEB UPDATE

Great Lakes Sustainable Suppliers Environmental Network (GLSSEN) www.michigan.gov/deqp2partnerships

Suppliers in this Great Lakes network collaborate and innovate to create healthy, sustainable supply chains for their customers in the region and around the world, focusing on continuous improvement to support strong economic growth, enhanced social responsibility and progressive environmental performance.



PUBLICATIONS

Michigan Fruit and Vegetable Processor's Guide to Environmental Regulations

The Michigan Fruit and Vegetable Processor's Guide to Environmental Regulations is now available online. The 300 page guidebook was developed by the Michigan Department of Environmental Quality's, Environmental Assistants Program in partnership with the Michigan Food Processor's Association and the Michigan Department of Agriculture. The guide is intended to assist fruit and vegetable processors, consultants, and regulators to better understand all state and federal environmental regulations, get tips on where to go for help, and obtain multi-media compliance assistance for their day-to-day operations. The guidebook is available on the Web at www.michigan.gov/deq, click on "Key Topics," then "Environmental Assistance," and then "Compliance Assistance Guidebooks." For further information contact the Environmental Assistance Center at 800-662-9278.

Ice Mountain - New Case Study

http://www.michigan.gov/documents/deg/deg-ess-p2tas-icemountain 200991 7.pdf

Ice Mountain's Stanwood Michigan water bottling plant became the first Leadership in Energy and Environmental Design (LEED)-certified food and beverage production facility in the state. This case study highlights the environmental, economic, and social considerations that influenced the plant's design, construction, and operation.

Meet Michigan's Clean Corporate Citizens - New 2006 Edition

www.michigan.gov/documents/deq/deq-ess-p2tas-c3-C3Report2006 199303 7.pdf

This report showcases 37 of Michigan's newest C3's, including their specific operations, policies, and achievements. There are 28 Longevity Award winners and numerous continuing C3's that are also recognized in this 2006 edition of "Meet Michigan's Clean Corporate Citizens."

Environmental Management System (EMS) Guidance Manual – Updated July 2007 www.michigan.gov/deq/0,1607,7-135-3307_3666_4149-102117--,00.html

The updated 2007 "Environmental Management Guidance Manual" was designed to assist small and medium sized businesses and other organizations in developing and implementing an environmental management system (EMS). The web site contains a complete version of the guidance manual and allows you to down load it by chapter. A number of tables and forms are also available in a Word format and are listed by number for each respective chapter.

EVENTS

SEPTEMBER, 2007 – FEBRUARY, 2008, 8:30 a.m. – 12:00 p.m.

Monthly Air Permit Application Workshop for First-Time Applicants, Constitution Hall, Lansing, Michigan. For most first-time applicants, completing the Permit to Install application is a daunting task. However, submitting a complete and timely application can be more manageable if you know what's expected. The MDEQ is offering this workshop designed to give information on how to submit a complete permit application. Since this workshop is geared to first-time applicants, a significant portion of the session is devoted to your specific application. Air Quality Division permit engineers will be available to discuss your permit application with you one-on-one. To take full advantage of this time with the permit engineer, it is recommended you bring detailed information about your project with you to the session. This training is designed for first-time air permit applicants who need help completing their permit application; however, those who have applied before and need a refresher are welcome to attend as well. Online registration is available at www.michigan.gov/deqworkshops, click on "Upcoming DEQ Workshops".

Registration Fee: \$25, which includes parking in the Ellis Parking Lot on the east side of Constitution Hall and training manual.

Information Contact: James Ostrowski, Environmental Science and Services Division, 517-241-8057, or Email at ostrowsj@michigan.gov.

Registration Information: Environmental Assistance Center, 800-662-9278, or Email at deqead-env-assist@michigan.gov.

WORKSHOP DATES

September 19, 2007 October 17, 2007 November 21, 2007 December 12, 2007 January 16, 2008 February 20, 2008

SEPTEMBER 27, 2007

TURNING REACH INTO AN OPPORTUNITY: A TRAINING ON IMPLEMENTING THE EUROPEAN UNION'S NEW REACH LEGISLATION, Lansing Community College West Campus, Lansing, Michigan. REACH – Registration, Evaluation, and Authorization of Chemicals – is the recently adopted overhaul of the chemicals management system in the European Union (EU). Entered into force June 1, 2007, REACH has important implications for U.S. firms exporting to European Member States. In order to help U.S. companies implement REACH and move beyond the law toward sustainable chemicals management, the Michigan Department of Environmental Quality and Lowell Center for Sustainable Production are presenting this training. Attend this one-day training to learn from one of the few REACH authors and other experts about what you need to know to comply with REACH, stay

competitive, and advance more sustainable chemicals management in your firm. Any company which exports chemicals or chemical mixtures into the EU; competes in Europe, the U.S. or elsewhere with products meeting European standards; or exports finished products to Europe should attend this training. Attendees will receive a database of tools and resources to help them make informed decisions about chemicals alternatives.

For complete conference agenda and registration information, go to www.chemicalspolicy.org/registration/shtml.

Registration fee is \$100 and includes continental breakfast, lunch, and conference materials. Pre-registration and pre-payment are required.

Registration and Information Contact: Yve Torrie, Lowell Center for Sustainable Production, 978-934-3121.

MAY 5-7, 2008

BROWNFIELDS 2008, Cobo Center, Detroit, Michigan. Save the date! Gear up for the largest gathering of national and international Brownfields stakeholders. With nearly 6,000 attendees, over 150 educational sessions, more than 200 exhibitors, and unrivaled networking events, the U.S. Environmental Protection Agency and the International City/County Management Association co-sponsored National Brownfields Conference is the premier event of its kind. "Brownfields 2008" includes timely and valuable knowledge and skill building workshops, exceptional business development and networking opportunities, and hundreds of product and service providers in the exhibit hall to meet your project needs. The MDEQ is an endorser of this event. Visit www.brownfields2008.org to learn the latest and sign up for the "Brownfields 2008" e-newsletter.

Registration information coming soon.

Information Contact: Ronald Smedley, Remediation and Redevelopment Division, 517-373-4805, or Email at smedleyr@michigan.gov.

If you are interested in participating in the development of any Environmental Science and Services Division event, please call **Mary Goodhall** at **517-241-7968** or email at **goodhalm@michigan.gov**.